



Finance and Capital Committee

Information Item IV-A

July 9, 2020

Sustainability Initiative Update

Washington Metropolitan Area Transit Authority

Board Action/Information Summary

☐ Action ☒ Information

MEAD Number:
202191

Resolution:
☐ Yes ☒ No

TITLE:

Sustainability Initiative Update

PRESENTATION SUMMARY:

Present Metro's Sustainability Initiative highlights and upcoming actions to the Board.

PURPOSE:

To update Board on Metro's sustainability accomplishments, illustrate Metro's progress in making sustainability the foundation that promotes resilient and fiscally responsible decision-making, and outline upcoming actions planned for the near future.

DESCRIPTION:

Identification of Parties with an interest
ICF, consultant for 2019 Sustainability Report

The annual Sustainability Report highlights Metro's role in the region's economic prosperity, livability and accessibility, and environmental impact. It also describes recent progress on sustainability initiatives and accomplishments. The Energy Action Plan Progress Report details Metro's progress in specific projects to reduce energy consumption and generate long-term cost savings.

Key Highlights:

Sustainability highlights from January 2019 to June 2020 include:

- As of June 2019, Metro is 21% of the way towards achieving the 2025 energy savings target established in the Energy Action Plan.
- As of June 2020, Metro has secured a \$4.1M Low-or-No Emission Grant from the FTA to purchase and operate two 60-foot articulated electric buses, which will advance the zero-emission bus fleet plan and will make the region's air cleaner, improve the customer experience, and help control operating costs.
- Metro has integrated sustainability into decision making, including the Andrews Federal Center Bus Garage, which was opened in 2019 and was awarded LEED Silver certification for its sustainable design and construction.
- Metro signed a 12-megawatt solar lease agreement in June 2020, anticipated to generate 15,000,000 kWh of power annually, enough to power about 1,200

single family homes for one year and it will provide annual lease revenue. It will also improve the customer experience at surface parking lots and parking garages at the Anacostia, Cheverly, Naylor Road and Southern Avenue stations.

Background and History:

Metro contributes to a more resilient, healthy, and equitable region to live, work, and visit by providing safe, equitable, reliable, and cost-efficient public transportation.

Metro meets the needs of the people, businesses, and communities we serve. To these ends, Metro has implemented many actions to reduce emissions and improve regional air quality, including converting its bus fleet to alternative fuel types and more efficient buses and upgrading station and facility lighting to LED lighting technology.

To reduce the environmental impact of Metro facilities, the Board adopted a policy in 2008 with a minimum goal of all new and substantially rehabilitated facilities being designed and built with the goal of receiving Leadership in Energy and Environmental Design (LEED) Silver Certification. Developed by the U.S. Green Building Council the LEED rating system for building construction provides incentives for lessening the impact of the built environment.

To further contribute to regional sustainability efforts, Metro launched its Sustainability Initiative in 2014, setting three regional and seven internal targets to achieve by 2025. The initiative was started to provide measurable and manageable progress toward aggressive but achievable targets. In the same year, Metro created the Sustainability Lab and Sustainability Awards to promote and recognize cost effective innovation and best practice adoption across the Authority. Metro reports annually on its sustainability programs and progress towards meeting its targets.

This year the Sustainability Report was broadened to include Metro's contributions to economic prosperity, livability and accessibility, while continuing to highlight the environmental impacts of our efforts.

The Sustainability Report highlights the accomplishments of Metro's sustainability program in the calendar year 2019, including the adoption of Metro's first-ever Energy Action Plan. The Energy Action Plan (EAP) is a detailed roadmap for saving energy and money through efficiency investments, modernized design and operation, and engagement in the regional energy market. The EAP Progress Report summarizes Metro's progress in implementing several programs that increase energy efficiency, mitigate risk, and promote fiscal responsibility.

Discussion:

Metro is implementing programs and upgrades aimed at improving economic, social, and environmental sustainability in the region and within internal operations.

The Sustainability Report and EAP Progress Report highlight Metro's recent accomplishments and illustrate Metro's progress in making sustainability a fundamental business approach.

In addition to the specific accomplishments described in the highlights above, Metro leveraged these sustainability efforts to establish a culture of continuing improvement - growing staff capacity and increasing staff knowledge and awareness. Projects completed in Calendar Year 2019 include:

- replacement of 75% of our chillers with efficient state-of-the-art technology
- installing updated LED lighting in 98% of the underground Metrorail station

In June 2020, Metro entered into a lease agreement to begin installing new solar installations at Anacostia, Cheverly, Naylor Road and Southern Avenue stations. In addition, Metro partnered with the GSA to improve natural gas supply contracts.

Metro's Annual Sustainability awards program has recognized over 50 staff in 5 years. This program rewards high achievement, innovation and leadership in sustainability across the agency. Staff are being supported as they bring advanced sustainability knowledge of new practices to Metro in areas ranging from modern facility management best practices, solar project development, and Envision certification for design and construction best practice.

Metro is building on these strong wins with fiscally responsible and sustainable programs to continue to promote best practice and innovation at the Authority. Actions underway or planned for the near future include:

- Advancing additional Energy Action Plan recommended investments. Priority projects already underway include full completion of station and non-revenue facility lighting upgrades as well as incorporation of traction power energy recovery technologies into the State of Good Repair program.
- Partnering with stakeholders to implement recommendations outlined in the Zero-Emission Bus Update and Bus Transformation Program. Metro will work with regional partners including engaging in regional policy and electrification working groups, participating in DC Public Utility Commission-approved electrification investment program, and evaluate potential on-route charging locations. Metro is initiating a fleet plan revision to account for zero-emission bus technology. We will also issue procurement for renewable natural gas

(RNG), identify required electric utility investment for electrification of Northern and Bladensburg bus garages and initiate the test and evaluation program for up to 14 electric buses and chargers at up to three locations.

- Integrating sustainability into decision making. Requiring LEED design for the Potomac Yard Station, Northern and Bladensburg Bus Divisions, and the three new headquarters buildings. Updating contract language and design specifications across all major capital projects. Update project selection criteria to incorporate sustainability and creating reporting on outcomes and benefits accrued. Develop Resilience Implementation Strategy incorporate quantified vulnerability and risk to extreme weather within investment prioritization. Update Metro's Sustainability Initiative targets and action plan.

- Continuing engagement on solar and renewable energy investments. Metro will assess the market readiness of additional solar investment that potentially build on the recently signed solar lease model, is identifying cost effective opportunities to incorporate green energy procurements, plans to issue an RFP for renewable natural gas swap in the coming months.

Metro is committed to developing and maintaining a sustainable transportation system that meets the needs of people, communities and businesses, and fosters the environmental, economic and social well-being throughout the region.

FUNDING IMPACT:

No impact for information items.

TIMELINE:

Previous Actions	July 2008 – Adopted Policy on LEED Certification
Anticipated actions after presentation	N/A

RECOMMENDATION:

No recommendations associated with this information item

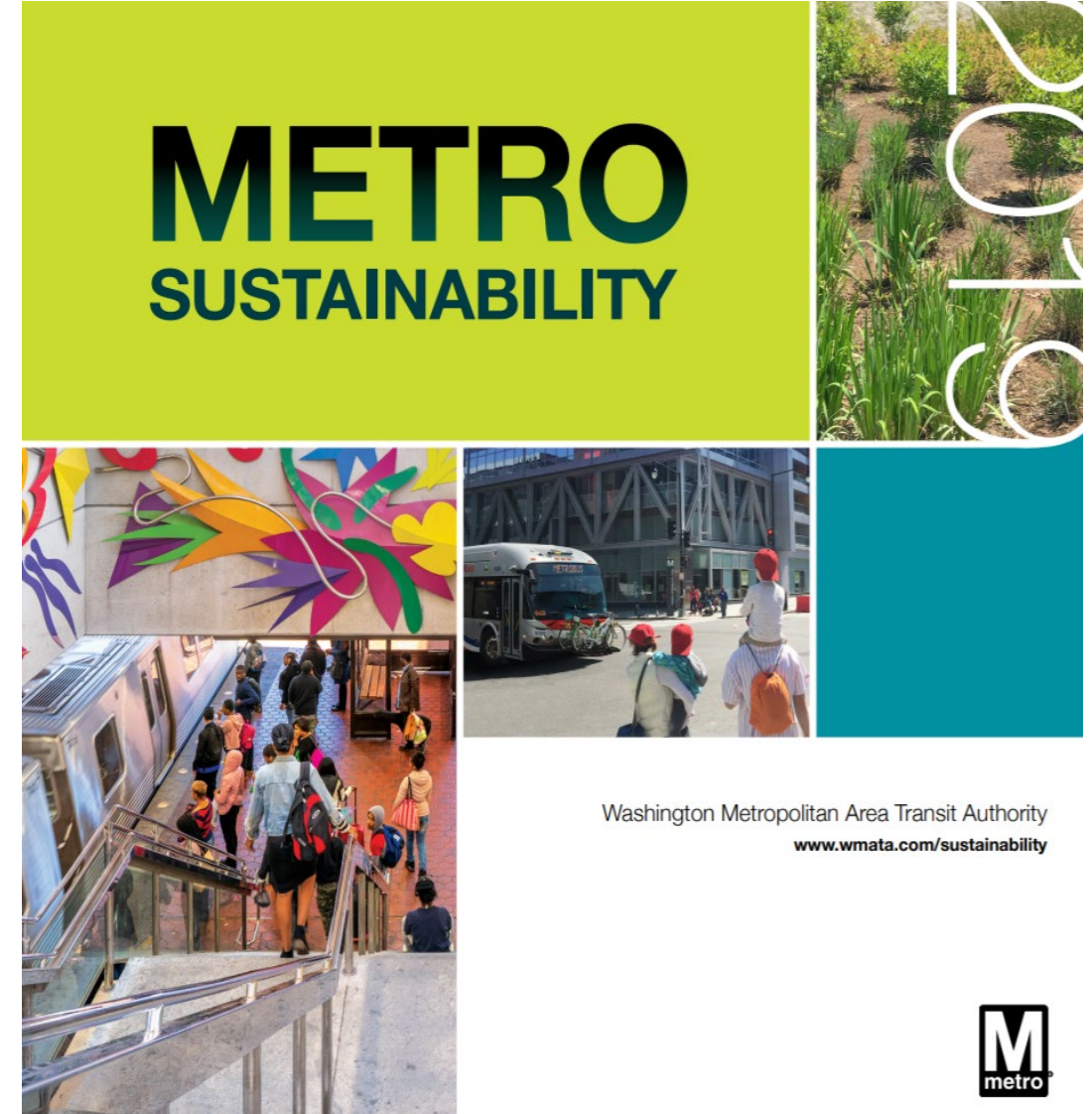
Sustainability Initiatives Update

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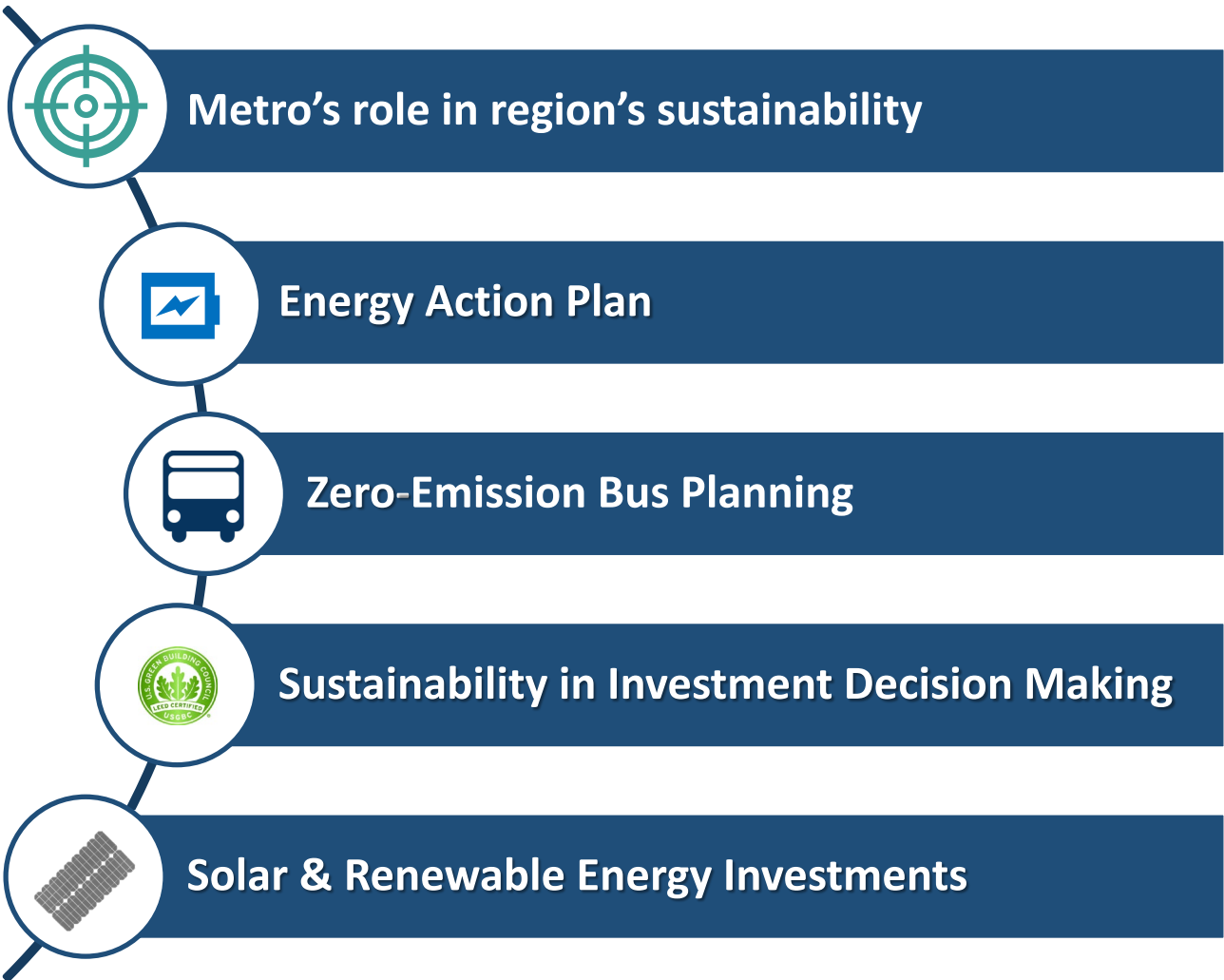


Purpose

- Highlight Metro's Role in Region's Sustainability
- Discuss Sustainability Progress
- Share Activities and Next Steps



Sustainability Highlights



Metro's Role in Region's Sustainability

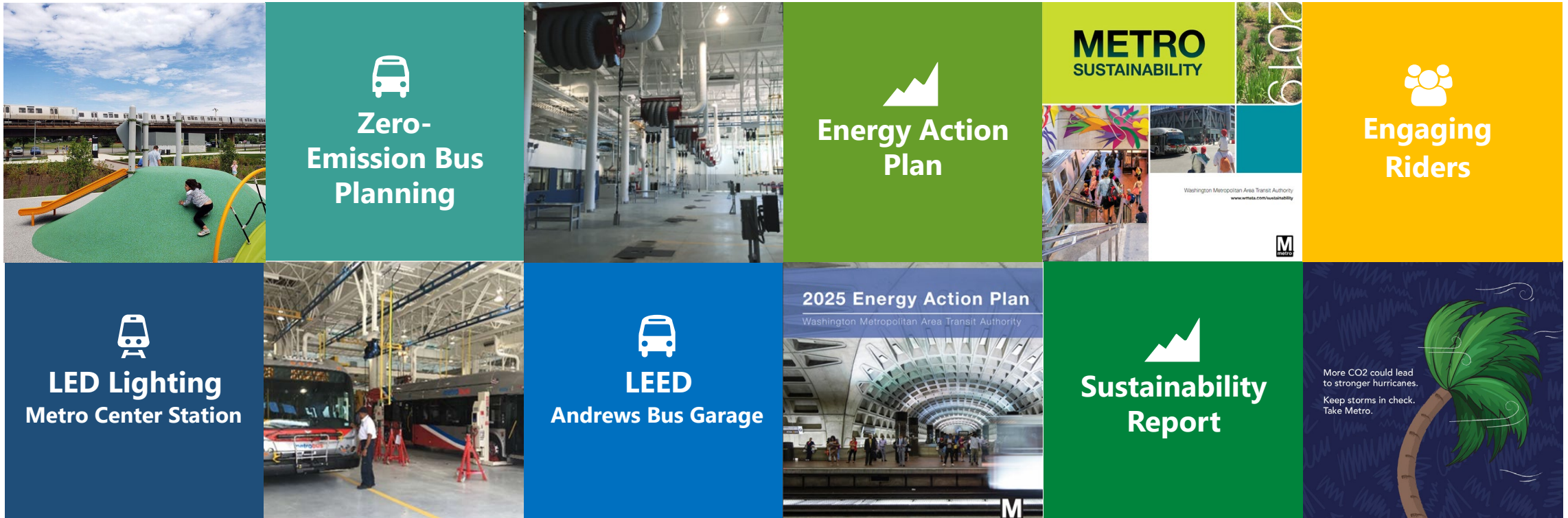
The 2019 Annual Sustainability Report highlights Metro's role in the region's economic prosperity, livability and accessibility, and environmental impacts

Metro contributes to a more resilient, healthy, and equitable region to live, work, and visit

Metro's transportation contributes value to the region by meeting the needs of people, communities, and businesses we serve



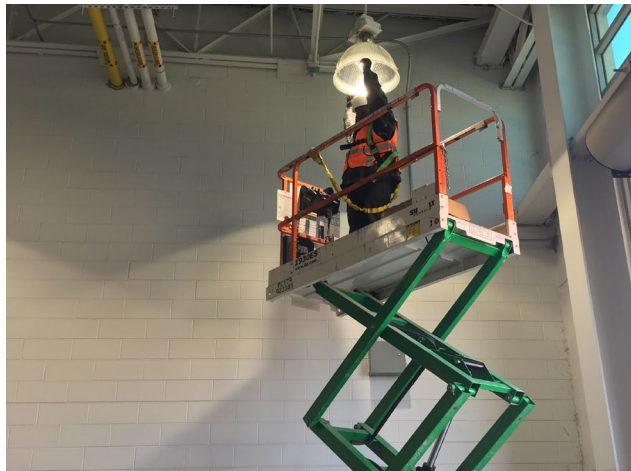
Sustainability is the core of the service Metro provides



Accomplishments

- First Energy Action Plan
- 21% towards 2025 energy savings target
- Avoided about \$3 million in energy costs in FY2019

Implementation of Energy Action Plan



Upcoming

- Complete station and facility LED lighting upgrades
- Incorporate traction power energy recovery technologies into State of Good Repair program
- Accelerate project implementation to reach 2025 energy savings target and reduce operating costs

Accomplishments

- Published Zero-Emission Bus Update

- Awarded \$4.1 million FTA grant for electric bus evaluation in an Opportunity Zone at Shepherd Parkway Bus Garage

Zero-Emission Bus Planning



Upcoming

- Issue RFP for electric bus evaluation

- Design Northern and Bladensburg Bus garages to be electric bus ready

- Engage stakeholders in Bus Transformation Program, including bus lanes, signal priority, and electric bus program

Accomplishments

LED lighting upgrades in underground stations 98% complete

Chiller replacement with efficient, state of-the-art technology - over 75% complete

LEED Silver awarded to Andrews Federal Center Bus Garage

Sustainability integrated in capital programming & procurement

**Sustainable,
resilient and
fiscally responsible
investment
decision making**



Upcoming

LEED design of Potomac Yard Station, Northern and Bladensburg bus garages, and office buildings

Updating design specs across all major capital projects

Reporting on sustainability outcomes and benefits

Develop Resilience Strategy and Action Plan

Accomplishments

- Solar Lease Agreement will generate enough to power about 1,200 single family homes and annual lease revenue
- New solar installations at Anacostia, Cheverly, Naylor Road and Southern Avenue stations
- Partnered with the General Services Administration (GSA) on Natural Gas supply contract
- Formed partnerships for strategic energy purchasing

Solar and renewable energy investments



Upcoming

- Assess market readiness of additional solar investment
- Identify cost effective opportunities to incorporate green energy procurements
- Issue RFP for renewable natural gas swap

Next Steps

- Continue Implementation
 - Energy Action Plan
 - Zero-Emission Bus Test and Evaluation
 - Sustainability through Capital Investments
- Board Consideration of Sustainability Policy and Principles

